## Pelvic floor muscle exercises for study participants

Week number	Exercise	Repetitions	Frequency and duration
Week 1	"Quick flicks" Goal: learning to activate pelvic floor muscles through short contractions.  Performance: Avoid contracting the abdominal, gluteal and thigh muscles or spine movement	10 short contractions in a series. 5 series with breaks of 30 seconds between the series.	~5 minutes at the end of general exercise session/3 times a week with the supervision of an exercise specialist
Week 2	"Stacking" Goal: fuller activation of the pelvic floor muscles through short, increasingly stronger contractions.  Performance: Each repetition of the exercise contains 3 increasingly stronger contractions (flicks) and slow reduction in tension up to complete relaxation. Count: '1, 2 3 – relax', in each repetition of the exercise.	10 repetitions in a series. 5 series with breaks of 30 seconds between the series.	~5 minutes at the end of general exercise session/3 times a week with the supervision of an exercise specialist
Week 3	"Endurance" Goal: maintenance of sustained holds of moderate intensity. Performance: Each repetition consists of 3 increasingly stronger flicks, maintaining sustained hold, gradually extending the duration (from 3 to 10 seconds), and then slowly reducing the tension up to full relaxation.  The contraction of the pelvic floor should be directed upwards and inwards. During the sustained holds, the pelvic-floor muscles should be activated as strongly as possible, without contracting other groups of muscles.	10 repetitions in a series.  10 sec. breaks between repetitions, contraction at the highest level to be kept for 3 – 10 seconds (gradually extending the duration together with the increase in the muscle power).  3 series with breaks of 30 seconds between the series.	~10 minutes at the end of general exercise session/3 times a week with the supervision of an exercise specialist
Week 4	"High-Intensity" Goal: maximum hold of high intensity in order to increase the mass and power of the muscles.  Performance: Each exercise repetition consists of 3 increasingly stronger flicks, maintaining maximum hold until the feeling of tiredness, execution of 5 pulsating	5 repetitions in a series, 10 seconds breaks between repetitions, maintenance of maximal hold (above 10 seconds) extending it by short pulsating	~10 minutes at the end of general exercise session/3 times a week with the supervision of an exercise specialist

	flicks before relaxing and then slow reduction of tension up to full relaxation.	contractions before relaxation.  3 series, with 30s breaks between the series.	
Week 5	"Complex activation" Goal: improving speed, strength and endurance of the pelvic-floor muscles. Increasing body awareness and differentiating moment of tension and relaxation of muscles.  Performance: One sequence of "complex activation" contains: 5 quick and maximal contractions with immediate relaxation (5 second pause between contractions (10 seconds contraction, 10 seconds pause) sustained hold lasting 60 seconds with immediate relaxation after the long contraction.	3 sequences of contractions and relaxation, 30s pauses between series.	~10 minutes at the end of general exercise session/3 times a week with the supervision of an exercise specialist
Week 6	"Maintenance" Goal: Improving the ability of activating the pelvic-floor muscles in daily activities. Work on the awareness of contracting the pelvic-floor muscles before sneezing, coughing, lifting objects.  Maintaining optimal health of the pelvic-floor muscles by performing regular tasks developed for week 4.	5 repetitions in a series, 10 seconds breaks between repetitions, maintenance of maximal hold (above 10 seconds) extending it by short pulsating contractions before relaxation.  2 or more series, with 30 seconds breaks between the series.  Contracting pelvic floor muscles each time before sneezing, coughing and lifting objects.	~5-10 minutes at the end of general exercise session/3 times a week with the supervision of an exercise specialist and contracting pelvic floor muscles each time before sneezing, coughing and lifting objects throughout the day

Above program is based on:
Miller, J. M. (2012). Graduated strength training: A pelvic muscle exercise program.Retrieved from <a href="http://www.med.umich.edu/1libr/HealthyHealing/GraduatedStrengthTraining.pdf">http://www.med.umich.edu/1libr/HealthyHealing/GraduatedStrengthTraining.pdf</a>